

issued



by the

SMITHSONIAN INSTITUTION
U. S. NATIONAL MUSEUM

Vol. 85

Washington: 1937

No. 3027

ON SOME ONYCHOPHORES FROM THE WEST INDIES
AND CENTRAL AMERICA

By AUSTIN H. CLARK

DR. EDWARD A. CHAPIN, curator of insects, United States National Museum, has been so kind as to submit to me for study a small but interesting collection of onychophores from the West Indies and Central America. It includes nine specimens of *Peripatus juliformis danicus* from St. Croix, two specimens of *Epiperipatus barbouri* from Tobago, two specimens of *Epiperipatus biolleyi* from Costa Rica, and a single specimen of a new species of *Macroperipatus* from Haiti.

The discovery of a species of *Macroperipatus* on the island of Haiti is especially interesting, as this genus was known heretofore only from Central and South America, ranging from Veracruz in Mexico southward to Rio de Janeiro in Brazil, including the island of Trinidad.

Five other onychophores are known from Haiti, all of which were recorded and described by Prof. Charles T. Brues from specimens collected by Drs. William M. Mann and P. J. Darlington. These five forms are *Peripatus manni*, related to the South American *P. sedgwicki*, and four subspecies of the purely West Indian *Peripatus dominicae*: *P. d. haitiensis*, *P. d. lachauxensis*, *P. d. basilensis*, and *P. d. darlingtoni*. Other subspecies of *Peripatus dominicae* occur on Dominica (*P. d. dominicae*), on Antigua and Montserrat (*P. d. antiguensis*), and on Puerto Rico and Vieques (*P. d. juanensis*).

In Haiti the four subspecies of *Peripatus dominicae* occupy localized and ecologically isolated habitats; *Peripatus manni* occurs with *Peripatus dominicae haitiensis*.

It is rather curious that, although two genera including six species and subspecies occur in Haiti, two genera including two species are found in Jamaica, and one genus with one species is known from Puerto Rico, no onychophores have ever been discovered in Cuba.

Genus PERIPATUS Guilding

PERIPATUS JULIFORMIS DANICUS Bouvier

Peripatus juliformis var. *danicus* BOUVIER, Quart. Journ. Micr. Sci., vol. 43, pp. 751-752, 1900; Ann. Sci. Nat., ser. 9, vol. 2, nos. 4-6, p. 245, pl. 7, fig. 52, 1905 (Jan. 1906).

Peripatus danicus A. H. CLARK, Proc. Biol. Soc. Washington, vol. 26, p. 17, 1913.

Locality.—Prosperity Garden, St. Croix, Virgin Islands: from rotting stump of a mammea tree; H. A. Beatty. Five females and four males.

Notes.—The largest female is 45 mm long and 4 mm broad, with 31 pairs of legs; another is 42 mm long and 4 mm broad, with 32 pairs of legs; a third is 40 mm long and 3.5 mm broad, with 31 pairs of legs; the fourth is 35 mm long and 3 mm broad, with 32 pairs of legs; and the fifth is 30 mm long and 2.7 mm broad, with 32 pairs of legs.

The males are as follows: 16 mm long and 2 mm broad, with 26 pairs of legs; 15 mm long and 2 mm broad, with 27 pairs of legs; 15 mm long and 2 mm broad, with 27 pairs of legs; and 9 mm long and 2 mm broad, with 27 pairs of legs.

Remarks.—This species was first recorded from St. Croix by Prof. Charles T. Brues in 1925 from specimens found under a rotten log by Dr. Frank E. Lutz.

Genus EPIPERIPATUS A. H. Clark

EPIPERIPATUS BARBOURI (Brues)

Peripatus barbouri BRUES, Bull. Mus. Comp. Zool., vol. 54, no. 8, p. 310, figs. 1, 2, pl. 1, 1911.

Locality.—Scarborough, Tobago; Allison V. Armour Expedition; H. F. Loomis, February 19, 1932. Two females.

Notes.—One of the specimens is 38 mm long and 3.7 mm broad, with 34 pairs of legs; the other is 22 mm long and 4 mm broad with 31 pairs of legs. Both specimens as preserved are light yellow-brown, lighter beneath, and unmarked. The color in life was not recorded.

Remarks.—This species was known heretofore only from the neighboring island of Grenada. It appears to be quite different from the form that I recorded from Tobago in 1913 under the name of *Peripatus (Epiperipatus) trinidadensis*, but it is possible that some, at least, of these differences may be due to the poor condition of the specimen on which that record was based.

EPIPERIPATUS BIOLLEYI (Bouvier)

Peripatus biolleyi BOUVIER, Bull. Soc. Ent. France, 1902, p. 258.—BOUVIER, Ann. Sci. Nat., ser. 9, vol. 2, nos. 4-6, p. 321, figs. 115-118, pl. 10, fig. 85, 1905 (Jan. 1906).

Epiperipatus biolleyi A. H. CLARK, Proc. Biol. Soc., Washington, vol. 26, p. 18, 1913.

Localities.—Parismina, Costa Rica; M. Valerio, July 26, 1928. Under the loose bark of old tree trunks. One female.

La Caja, San José, Costa Rica; M. Valerio, 1913. One female.

Notes.—The specimen from Parismina is 55 mm long and 6 mm broad and has 31 pairs of legs. The specimen from San José is 45 mm long and 5 mm broad and has 29 pairs of legs.

Genus MACROPERIPATUS A. H. Clark

MACROPERIPATUS INSULARIS, new species

Locality.—Between Jacmel and Tronin, Haiti; Dr. O. F. Cook, April 11, 1926. One female, the type (U. S. N. M. no. 1275).

Description.—The type and only specimen is a female 55 mm long, 4.5 mm broad, and 2 mm high, with 30 pairs of legs.

The dorsal plications are very regular, all of the same width. The principal papillae are subequal, on squarish or oblong bases that rise into a broad and very low cone surmounted by a high and prominent truncated cone or slightly tapering cylinder. The large papillae are commonly separated by one or two less developed papillae that often lack the terminal cone, rising from narrow bases. On the dorsal surface between the legs of each pair there are two intercalated partial plications, giving rise to a slight irregularity. The two plications over the middle of each leg tend to divide, more or less irregularly, just above the leg, there forming three or four short, irregular, incomplete plications. The midline of the dorsal surface does not differ from the remainder, except that here the bases of the papillae are narrower.

The legs of the fourth and fifth pairs bear four arcs with fragments of a fifth. The urinary tubercle rather strongly depresses the fourth arc, and appears to be independent of the third.

The salivary glands extend to the vicinity of the genital orifice.

The color in alcohol is uniform yellow-brown, lighter beneath. The color in life was not recorded.

Affinities.—This new species appears to be rather closely related to *Macroperipatus perrieri* (Bouvier) from Veracruz, Mexico. The type and only known female of that species is 51 mm long and has 32 pairs of legs.